

Notice of Allowability

Application No.

09/900,001

Examiner

Aravind K. Moorthy

Applicant(s)

MCARDLE ET AL.

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/16/06.
2. ☒ The allowed claim(s) is/are 1,4-13,16-25 and 28-42.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Art Unit: 2131

DETAILED ACTION

1. This is in response to the arguments filed on 16 November 2006.
2. Claims 1, 4-13, 16-25 and 28-42 are pending in the application.
3. Claims 1, 4-13, 16-25 and 28-42 have been allowed.
4. Claims 2, 3, 14, 15, 26, 27 and 43 have been cancelled.

EXAMINER'S AMENDMENT

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kevin J. Zilka on 1 February 2007.

The application has been amended as follows:

Claim 2 (cancelled)

Claim 14 (cancelled)

Claim 26 (cancelled)

Claim 43 (cancelled)

Response to Arguments

6. Applicant's arguments, see pages 2-8, filed 16 November 2006, with respect to claims 1, 4-13, 16-25 and 28-42 have been fully considered and are persuasive. The rejection of the claims has been withdrawn.

Allowable Subject Matter

7. Claims 1, 4-13, 16-25 and 28-42 are allowed.

The following is an examiner's statement of reasons for allowance:

The current application is directed towards outgoing data units, such as packets, from a computer system that contain data characteristic of an operating system executing on the computer system that are intercepted before they are transmitted on a network and masked to impersonate a different operating system if the network is untrusted. The masking may be to re-fingerprint the data units by replacing the data characteristic of the actual operating system with data characteristic of a different operating system.

The closest prior art to the current application was Vairavan (US 2002/0083344 A1) and Drake (U.S. Patent No. 6,006,328). Vairavan teaches an invention which "overcomes the deficiencies and limitations of the prior art by providing an inter/intra-networking device that... comprises a plurality of access device cards, a packet processor, a security processor, a system processor and a switching fabric". On the other hand, Drake teaches computer code protecting software against eavesdropping, local and remote tampering, examination, tracing, and spoofing by rouges. Drake teaches "several security-enhancing techniques to combat eavesdropping," including "preventing the disassembly of the code through the inclusion of dummy instructions and prefixes and additional code to mislead and hamper disassembly". Drake relates to "replacing software which is vulnerable to eavesdropping with equivalent software which is far more secure". However, this does not suggests "replacing the portion of outgoing network data with data characteristic of the different operating system to prevent identification of the operating system by impersonating the different operating system", as claimed by the applicant.

Art Unit: 2131

Merely replacing vulnerable software with secure software does not even suggest any sort of outgoing network data, let alone “replacing the portion of outgoing network data with data characteristic of the different operating system”, in the context claimed by the applicant. Furthermore, disclosing that the invention has general application to many operating systems, as in Drake, fails to rise to the level of specificity nor even suggest “impersonating the different operating system for misleading attackers into attempting attacks that are unworkable on the operating system”, in the manner as claimed by the applicant.

Any claims not directly addressed are allowed on the virtue of their dependency.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”


Art Unit: 2131


Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aravind K. Moorthy whose telephone number is 571-272-3793. The examiner can normally be reached on Monday-Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aravind K Moorthy 
February 1, 2007


AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100